

Learning Flow

Year 3 – Science – Term 2 – Light

What do we already know?

- Topic Page - Prior knowledge , What do we already know? What questions do we have? What is a significant individual? How might they have changed our world?

How do we see?

- Recognise that they need light in order to see things.
- Recognise that dark is the absence of light.
- How can light affect our sight?

KPI - Light is from light sources and we see by reflected light that travels in straight lines and enters our eyes.

Reflective materials

- What happens when the light hits a reflective material?
- What happens if you change the position of the light?

KPI - Use scientific language and read and spell age-appropriate scientific vocabulary.

Significant Scientist

- Learn who Justin von Liebig is
- What was his scientific discovery?
- How does his discovery impact us today?

How are shadows formed?

- What is a shadow?
- Explore transparent, translucent and opaque materials. What do they observe? Record.
- How can the darkness of the shadow be changed?

KPI - Understand the idea of shadow formation and size. Making careful observations and, where appropriate, taking accurate measurements using standard units with a range of equipment.

How can the sun be dangerous?

- How can the sun be harmful to us?
- How can we protect ourselves?
- How does it affect our eyes?- Dark to light.
- UV. What is it? How can we protect ourselves? UV beads.

What do we know now?

- Make it! Information poster about sun safety
- Quiz.
- Flashforward- Next term. What do we know?

Learning Flow

Year 4– Science– Term 2– Living things and their habitats

What do we already know?

- Topic Toolkit – Prior knowledge , What do we already know? What questions do we have? What is a significant individual? How might they have changed our world?
- Recap- Year 2 knowledge- grouping animals.

What is classification?

- Explore classification, how it can be used and why it is important.
- Who created clasifciation? Carl Linnaeus

How can animals be grouped/ classified?

- Explore classification keys.
- Classify animals from around the world.
- Compare classification.

Can group living things into different categories using classification keys .

Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions.

Identifying differences, similarities or changes related to simple scientific ideas and processes.

How can plants be grouped/ classified?

- Explore classification keys.
- Classify plants from around the world.
- Compare classification.

Can group living things into different categories using classification keys .

Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions.

Identifying differences, similarities or changes related to simple scientific ideas and processes.

How do changing environments impact living things?

- Understand how seasonal change impacts living things.
- Understand how climate change can affect living things.

The pupil can explain how environmental changes may have an impact on living things.

Significant Scientists

Seiran Sumner (1974 - Present)

Dr Seirian Sumner is an evolutionary biologist and behavioural ecologist.

Ecologists study the relationships between living organisms and their environment.



What do we know now?

- Knowledge demonstration- video
- Quiz.
- Flashforward- Next term. What do we know?

Learning Flow

Year 3 – Geography – Term 2 – Pole to Pole

What do we already know?

Topic Page – Prior knowledge , What is Geography? Why it important? What do we already know? What questions do we have?

What are the Poles and where are they?

- North Pole/Arctic Circle –area, inhabitants
- South Pole Antarctic– area, inhabitants
- Research

Longitude and Latitude

- Understand what longitude and latitude lines are and what they are used for.
- Identify the position and significance of the polar regions.

What is the physical geography at the Poles?

- What is the physical geography at the Poles?
- Land use
- Species of animal

How is Europe different to these polar regions?

- Location
- 51 countries in Europe 10% of the world's population
- Northern hemisphere with the Arctic Ocean to the north, the Atlantic Ocean to the west and the Mediterranean Sea to the south.

KPI – Pupils can build on prior knowledge of UK regions by using maps to locate countries of Europe.

KPI –Pupils can identify and compare key areas on a map of Europe and compare and contrast.

How can we present what we have learned?

- Use simple presentation devices to communicate knowledge gained about Polar Regions.

KPI– present information to a specific audience to highlight the findings of key environmental factors.

What do we know now?

- Knowledge demonstration– Make it!
- Quiz.
- Flashforward– Next term. What do we know?

Learning Flow

Year 4– Geography– Term 2 – Biomes

What do we already know?

Topic Toolkit – Prior knowledge , What is Geography? Why it important? What do we already know? What questions do we have?

Recap– Year 3 knowledge– lines of longitude and latitude. Year 4 knowledge– climate zones.

What is a Biome?

- Explore the 6 types of biomes around the world.
- rainforest, tundra, desert, savannah, grassland, woodland

Where can Biomes be found?

- Identify hemishperes.
- Locate Biomes on maps & atlases.
- Identify patterns in location

L2- Pupils can locate other Biomes (eg rainforests) using Google Earth and maps.

What is a rainforest? Where are they located?

Why are they important?

- Identify what rainforests are like.
- Locate rainforests around the world.
- Understand why rainforests are important.

L2- Pupils can locate other Biomes (eg rainforests) using Google Earth and maps.

What is the Amazon rainforest like?

- Study life in the Amazon rainforest through primary sources.
- Make comparisons to life in the UK and consider how life is different

L3-Pupils can identify patterns in their location linked to the equator line.

How are rainforest biomes and climates affected by humans?

- Explore climate change & deforestation and how humans are connected to this.

E1-Present information on key changes in climate zones and environmental changes over time.

What do we know now?

- Knowledge demonstration– persuasive letter.
- Quiz.
- Flashforward– Next term. What do we know?

Learning Flow

Year 3 & 4– PSHE – Term 2 – How do we treat each other with respect?

What do we already know?

- Topic Toolkit – Prior knowledge, What is PSHE? Why it important? What do we already know? What questions do we have?

Polite and respectful behaviour

- Understanding how to be polite and courteous in different situations.
- Recognise respectful behaviour that I should receive from others.
- Book – *Ish* by Peter H Reynolds

Rights and responsibilities

- Understand the difference between rights and responsibilities.
- Book – *Dreams of Freedom* by Amnesty International

Children's rights

- Understand the rights I have as a child.
- Recognise why my rights are important and need to be protected.
- Book – *We Are All Born Free* by Amnesty International

The right to privacy

- Understand everyone's right to privacy.
- Recognise when a secret should be kept and when to tell.
- Book – *Beegu* by Alexis Deacon

How does behaviour affect others?

- Recognise that everyone should feel included, respected and not discriminated against.
- Understand how people's behaviour affects themselves and others, including online.
- Book – *Amazing Grace* by Mary Hoffman

How to respond to negative behaviour?

- Learn how to respond to aggressive or inappropriate behaviour
- Understand how to report concerns
- Book – *Is it because...?* by Tony Ross

What do we know now?

- Knowledge demonstration– Tool Kit.
- Flashforward– Next term. What do we know?

Learning Flow

Year 3 & 4– RE – Term 2 – Why does Christmas matter to Christians?

What do we already know?

Topic Toolkit – Prior knowledge, What is Geography? Why is it important? What do we already know? What questions do we have?

Exploring the Bible

- Incarnation is part of the 'Big Story'.
- Look at the 'Big Story' frieze.
- God coming to Earth as baby Jesus is also part of the 'Big Story'.

Outline the timeline of the 'big story' of the Bible, explaining the place within it of the core concepts studied.

The Stories of Jesus' birth

- There are two more stories in the Bible about Jesus being born. Introduce stories of the angel appearing to Joseph, telling him that the baby is from God and should be called Jesus (Matthew 1:18–25), and the visit of the wise men (Matthew 2:1–12)

Identify ideas arising from their study of texts and concepts, and comment on how far these are helpful or inspiring, justifying their responses.

The King

- Look at Botticelli's 'Mystic Nativity'
- Which looks like a king?
- How is the artist showing the baby is special?

The meaning of Christmas

- Look at images of the nativity story.
- Which characters show the Christian meaning of Christmas?

How do Christians put their beliefs into practice?

- Christmas is a time for giving.
- The wise men gave presents when Jesus was first born.
- Lots of Christians like to give presents and help to those in need at Christmas time. Learn about two charitable projects for Christmas

Show how Christians put their beliefs into practice in different ways, for example in different denominations.

What do we know now?

- Knowledge demonstration
- Quiz.
- Flashforward- Next term. What do we know?